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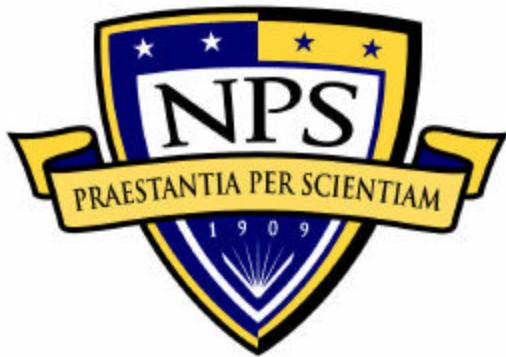


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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

ADULT LEARNING AND NAVAL LEADERSHIP TRAINING

by

Melanie J. Hitchcock

June 2004

Thesis Advisor:
Second Reader:

Alice Crawford
Stephen Mehay

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ADULT LEARNING AND NAVAL LEADERSHIP TRAINING

Melanie J. Hitchcock
Commander, United States Navy
B.A., University of California, Berkeley, 1985

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
June 2004

Author: Melanie J. Hitchcock

Approved by: Alice Crawford
Thesis Advisor

Stephen Mehay
Second Reader

Douglas A. Brook, Ph.D.
Dean, Graduate School of Business and Public Policy

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ABSTRACT

Adult learning embraces andragogy, constructivism, Transformative Learning Theory, praxis, and the understanding that not all adults are prepared initially for complete learning autonomy. The concept of andragogy can be traced to the Nineteenth Century, and the volume of follow-on research has reinforced the basic tenants of adult learning. It is, therefore, valid to expect that adherence to adult learning will indicate one measure of the effectiveness of curricula that target adults.

This thesis, therefore, analyzes the Center for Naval Leadership Facilitator Training course and the Center for Naval Leadership Learning Site, Coronado Advanced Officer Leadership Training Course curricula for adherence to the adult learning model. The curricula follow adult learning practices to a great extent within the parameters of the military environment and limited resources

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I. INTRODUCTION

A. PURPOSE

Andragogy, the study of how adults learn, can be found in literature as far back as the 19th Century. Malcolm Knowles spearheaded the study and development of andragogy in the United States beginning in the 1950s. Andragogy is based on pedagogy. A key aspect of andragogy is that all adults need to understand why they are undertaking learning and that the learning will somehow enhance their work or personal life. Adults must feel respected and valued and their experiences must be integral to the learning process. Andragogy also recognizes the adult's need to be involved in the learning process making decisions as to what material to learn and how that material will be learned. Finally, andragogy recognizes that adults must have peer interaction to learn in order for the learning to be effective. Knowles developed an andragagogical process to guide facilitators. The process includes establishing a climate conducive to free exchange of ideas, an organizational structure that allows for participative planning, needs diagnosis, the formulation of learning objectives, the design of learning activities, the accomplishment of those learning activities, and evaluation. (Knowles, 1980)

The major criticism of andragogy is the assumption that all adults are capable of complete participative planning or self-directedness, by virtue of being adult. Adult learning is a concept distinct from andragogy as it encompasses andragogy but also the research that recognizes and accepts the validity of this criticism. Even Knowles accepts that andragogy is a process to be used situationally, that it is not dogma and cannot be followed verbatim for every adult learner. Most adults need some degree of development or preparation to completely embrace the autonomy of adult learning. However, the long and consistent history of the use of adult learning practices make it a reasonable framework in which to evaluate the effectiveness of adult training courses. Chapter II will demonstrate that many varied studies throughout the twentieth century support the appropriateness of the adult learning process in the effective

training of adults. The purpose of the thesis is to analyze two Navy leadership training courses with respect to how well they adhere to accepted adult learning practices.

B. BACKGROUND

1. Organizational Structure for Navy Training

The Navy's need to recruit and retain the highest caliber personnel to man the Navy of the future demands that it restructure its education and training programs to meet the needs of its Sailors. The Task Force for Excellence through Commitment to Education and Learning (EXCEL) was created to develop the process and infrastructure to implement this idea. As part of Task Force EXCEL, the "Revolution in Training" was developed to support this concept. That is, education and development of personnel for personal growth is a responsibility of the Navy.¹

The Revolution in Training is a completely new concept of training for the Navy. It uses distance (e-learning), self-paced, reusable classroom training, and capstone seminar methods to deliver more education and training to the fleet with greater convenience to the Sailor and flexibility for operational commitments.² It has produced some significant changes in the way training is both looked at and conducted. A key element of the Revolution in Training is the Five Vector Model³ (see Figure 1). This is a five-pronged career guide for sailors to better prepare for and compete for jobs and advancement in the Navy. The model is in a pilot stage. The Five Vectors are Professional Development, Personal Development, Professional Military Education and Leadership, Certifications and Qualifications, and Performance.⁴

In support of this new concept, Commander, Naval Education and Training (CNET) was restructured to become the Naval Education and Training Command (NETC). Additionally, a new layer was created under NETC, the

¹Website "chips.navy.mil/archives/02_spring/index2_files/revolution.html," May 6, 2002

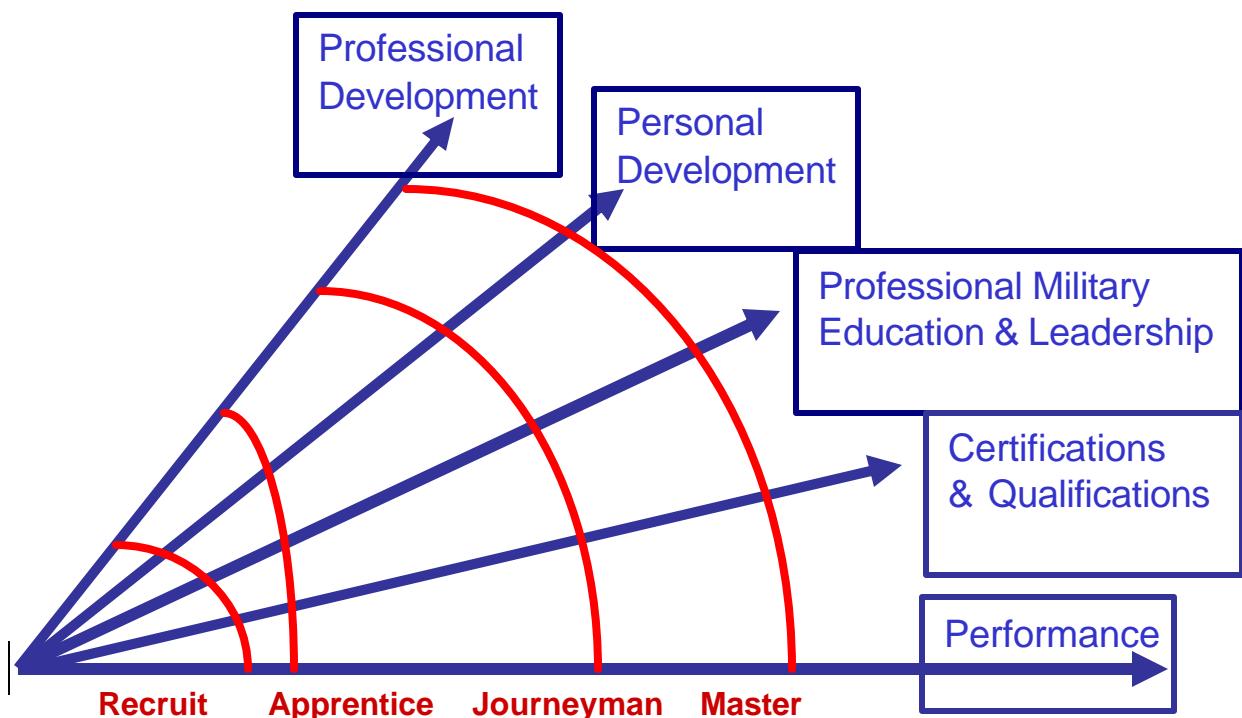
² Website "chips.navy.mil/archives/02_spring/index2_files/revolution.html," May 6, 2002

³ Website "nko.navy.mil," May 6, 2002

⁴ NAVPERSDEVCOM Revolution in Training Brief, March13, 2003

Naval Personnel Development Command (NPDC). NPDC supports, integrates and standardizes the training development and delivery for all Navy Sailors. To sustain the professional military education and leadership vector, the Center for Naval Leadership (CNL) was created. Leadership training delivery is now under the Center for Naval Leadership. Delivery is accomplished through Learning Sites throughout the world. They are at Little Creek, Coronado, Bangor, Great Lakes, Groton, Ingleside, Kings Bay, Lemoore, Mayport, Pearl Harbor, Pensacola, Washington DC, Port Heuneme, Whidbey Island, Rota Spain, and Yokosuka Japan.⁵

Figure 1: Five Vector Model⁶



⁵ NAVPERSDEVCOM Revolution in Training Brief, March13, 2003

⁶ Website "nko.navy.mil" May 5, 2002

2. Leadership Training

As part of the Revolution in Training, the leadership continuum is a concept of continuous leadership training throughout a career, cradle to grave⁷. It consists of eight leadership courses that are presently two weeks long and the Senior Enlisted Academy that is nine weeks long. The facilitators for these courses attend the Facilitator Training Course in Little Creek, Virginia.

One of the focuses of the Revolution in Training is to better connect training to fleet needs.⁸ NPDC illustrates the concept as a cyclical process that has the fleet both defining the requirements and implementing the solutions, while the Center develops the solutions and evaluates the success of them.⁹

The CNL leadership courses under the “Revolution in Training” target career milestones such as Work Center Supervisor, Leading Petty Officer, Divisional or Departmental Chief Petty Officer, Division Officer, Department Head, Command Master Chief, Executive Officer, and Commanding Officer.

Specific leadership courses include the following:

1. First Line Leader Development Program (FLLDP), which is for Work Center Supervisors.
2. Primary Leader Development Program (PLDP), which is for Leading Petty Officers.
3. Advanced Leader Development Program (ALDP), which is for Divisional or Departmental Chief Petty Officers.
4. Division Officer Capstone, which is for Division Officers.
5. Intermediate Officer Leadership Training Course (IOLTC) and Advanced Officer Leadership Training Course (AOLTC), which are both for those officers holding Department Head or Officer-in-Charge positions. It depends on

⁷ Leadership Continuum April 2004, website “cnet.navy.mil/leadcon.html”

⁸ NAVPERSDEVCOM Revolution in Training Brief, March13, 2003

⁹ NAVPERSDEVCOM Revolution in Training Fleet Update, 2001

the level of experience of the officer and size of the department as to which course will be attended.

The FLLDP and ALDP were recently removed as mandatory requirements for advancement to Petty Officer First Class and Senior Chief Petty Officer.¹⁰ However, the PLDP course that targets Leading Petty Officers is still mandatory for participation in the Chief Petty Officer advancement examination. Since the continuum is progressive, it is strongly encouraged that Sailors attend FLLDP before PLDP.¹¹ Further, the Five Vector Model will track completion of these and other training courses. This is done as a measure to allow greater flexibility for the Fleet as to when Sailors will be sent to school. Failure to complete them, however, will make the Sailor less competitive for jobs and advancement.¹²

An integrated learning approach to the leadership courses incorporates classroom discussion with skill building. The foundation themes of the courses are: values; responsibility, authority, and accountability of leadership; unity of command, Navy and services; and, risk management/continuous improvement.

In addition to the courses described, certain professional assignments and warfare pipeline training will require refresher leadership training. Finally, there is also a command training component for annual refresher training.¹³

This thesis analyzes the Advanced Officer Leadership Training Course at Coronado, California, in conjunction with the Facilitator Training curriculum at Little Creek, Virginia, to determine how well they adhere to accepted adult learning practices to draw conclusions as to their effectiveness. This is addressed in detail in Chapter III.

¹⁰ NAVADMIN message 96/04

¹¹ *Waterline*, April 2, 2004

¹² *Waterline*, April 2, 2004

¹³ Leadership Continuum April 2004, website “cnet.navy.mil/leadcon.html”

3. Research Questions

The specific research questions addressed in this study are:

a. Primary Question:

How well do the Facilitator Training Course and Advanced Officer Leadership Training Course adhere to accepted adult learning practices?

b. Secondary Questions:

(1) What are the current theories for training adult learners and how are they implemented in practice?

(2) Which of these theories and practices does Center for Naval Leadership Learning Site (CNLLS) Coronado use in its curriculum?

(3) What are the unique needs and requirements of CNLLS Coronado that are different from other adult training organizations?

4. Scope and Methodology

The curricula are analyzed with respect to adherence to the adult learning Model as delineated in Chapter II. Due to the unavailability of data, student perspectives following training as to whether or not the curriculum is germane to their jobs is not included. Further, this is not a longitudinal study. It analyzes the curricula at a particular point in time and compares them to the Adult Learning Model, only. Since only two courses are evaluated, there is no expectation that the results will generalize to other Navy leadership courses.

5. Organization of Thesis

Chapter II summarizes the pertinent literature from adult learning and concludes with a framework that includes key aspects of adult learning. A description of the courses and detailed analysis based on the framework established in the previous chapter is presented in Chapter III. Chapter IV provides conclusions and recommendations.

II. LITERATURE REVIEW

A. BACKGROUND

The history of the term andragogy has been thoroughly researched in the latter half of the twentieth century. A Dutch adult educator, Ger van Enckevort, traced the term as far back as 1833. (Knowles, Holton and Swanson, 1998) According to Malcolm Knowles, who is considered one of the preeminent authorities on andragogy, and was a professor in adult education and a consultant in the field for over 50 years, van Enckevort found that a German elementary school teacher, Alexander Kapp used the term androgogik in 1833 to describe Plato. (Knowles, Holton and Swanson, 1998) It then fell out of use until 1921 when another German adult educator, Eugen Rosenstock, used it to describe what he believed were the unique requirements of adult educators. “[Rosenstock] expressed the opinion that adult education required special teachers, special methods, and a special philosophy.” (Knowles, Holton and Swanson, 1998). These unique requirements will be discussed as they apply to adult learners, adult educational techniques, and, adult educators. This section of the thesis addresses andragogy in some detail, related concepts, the implications of the model for facilitating learning and criticisms of andragogy. This chapter also summarizes the concepts that will be used in the next chapter to evaluate the Facilitator Training Course and the Advanced Officer Leadership Training.

B. ANDRAGOGY

Depending on the particular author and the publication date, there is considerable variation in the ‘crucial assumptions’ of andragogy. The common thread is that the adult learner requires involvement in the learning process, a process that values the learner’s experience. The writings of Knowles, (1980, 1998) Brookfield (1986), Carl Rogers (Knowles, Holton and Swanson, 1998), Kurt Lewin (Vella, 2002), and Allen Tough (Brookfield, 1986) contribute to a more broad understanding of the concept. Andragogy, in its strict sense, assumes the adult learner is capable to being self-directed in his learning process. Adult

learning includes all aspects of andragogy but recognizes that andragogy needs to be used in varying degrees as the student and situation dictate. Adult learning uses andragogy to a greater or lesser extent to identify where the learner is, what the institution can support and then helps the learner both learn the tasks and skills desired and grow toward greater autonomy and critical thinking.

1. Andragogy: Knowles and Brookfield

A description of andragogy, or adult learning, relies heavily on the ideas of Malcolm Knowles who defines learning as a function of several components:

... filling a need; learning as product; learning as process; learning as function; natural growth; control; shaping; development of competencies; fulfillment of potential; personal involvement; self-initiated; learner-evaluated; independent learning; and learning domains. (Knowles, Holton and Swanson, 1998)

By including all these components of adult learning, Knowles shows that adult learning is a multifaceted, developmental process with numerous outcomes. Given these multiple outcomes, Knowles defines the educator as "...the agent of change who presents stimuli and reinforcement for learning and designs activities to induce change." (Knowles, Holton and Swanson, 1998) Implicit here is the fact that the educator may need to learn new skills to meet the multiple requirements that come with the practice of andragogy. This idea is addressed in more detail later in this chapter.

Knowles bases andragogy on the pedagogical model, modified to adapt to adult learners. The key here is that "[t]he pedagogical model assigns to the teacher full responsibility for making all decisions about what will be learned, how it will be learned, when it will be learned, and if it has been learned." (Knowles, Holton and Swanson, 1998) In the pedagogical model, the learner receives rather than participates. Andragogy, by contrast, assumes that the learner is to some greater or lesser extent self-directed and has experience valuable to the learning process, experience that is necessary for the learner to engage in any further learning activity. Since all adults are not necessarily completely autonomous, pedagogy is a starting point of the andragogical process. In fact,

while Knowles emphasizes the uniqueness of andragogy compared to pedagogy, he does not disregard pedagogy. Rather he sees both models as useful tools for adult learning. (Knowles, 1980) As is discussed in more detail later in this chapter, andragogy challenges the facilitator to find ways to motivate and guide the student to become self-directed rather than to accept and adjust to the pedagogical approach.

Knowles' andragagogical model is based on the following assumptions:

The need to know. Adults need to know why they need to learn something before undertaking to learn it....*The learners' self-concept.* Adults have a self-concept of being responsible for their own decisions, for their own lives....*The role of the learners' experiences.* Adults come into an educational activity with both a greater volume and a different quality of experience from youth....*Readiness to learn.* Adults become ready to learn those things they need to know and be able to do in order to cope effectively with their real-life situations. An especially rich resource of "readiness to learn" is the developmental tasks associated with moving from one developmental stage to the next....*Motivation.* While adults are responsive to some external motivators (better jobs, promotions, higher salaries, and the like), the most potent motivators are internal pressures (the desire for increased job satisfaction, self-esteem, quality of life, and the like). Tough...found in his research that all normal adults are motivated to keep growing and developing, but this motivation is frequently blocked by such barriers as negative self-concept as a student, inaccessibility of opportunities or resources, time constraints, and programs that violate principles of adult learning. (Knowles, Holton and Swanson, 1998)

Knowles translates the andragagogical assumptions into practical applications for the field. He developed the andragagogical process as an aid to facilitators in the field. The process includes:

- 1) The establishment of a climate conducive to adult learning;
- 2) The creation of an organizational structure for participative planning;
- 3) The diagnosis of needs for learning;

- 4) The formulation of directions of learning (objectives);
- 5) The development of a design of activities;
- 6) The operation of the activities; [and,]
- 7) The rediagnosis of needs for learning (evaluation)." (Knowles, 1980)

Brookfield's writings challenge andragogy in that he believes all adults are not capable of complete self-directed learning but that the movement toward an individual's ability to use praxis is an important activity. Brookfield is adamant that andragogy is not a theory because it is not realistic to expect all adults to be ready and willing to learn in exactly the same way. For example, Brookfield reiterates Knowles' concept that andragogy is a model that can be employed partly or entirely as each situation dictates. He recognizes the value of adult learning and cites many researchers' works in the field that support the general themes of andragogy. He says:

The specification of principles of adult learning undertaken by Gibb, Miller, Kidd, Knox, Brundage and Mackeracher, Smith, and Darkenwald and Merriam can be summarized as follows: Adults learn throughout their lives, with the negotiations of the transitional stages in the life-span being the immediate causes and motives for much of this learning. They exhibit diverse learning styles-strategies for coding information, cognitive procedures, mental sets-and learn in different ways, at different times, for different purposes. As a rule, however, they like their learning activities to be problem centered and to be meaningful to their life situation, and they want the learning outcomes to have some immediacy of application. The past experiences of adults affect their current learning, sometimes serving as an enhancement, sometimes as a hindrance. Effective learning is also linked to the adult's subscription to a self-concept of himself or herself as a learner. Finally, adults exhibit a tendency toward self-directedness in their learning. (Brookfield, 1986)

From these principles, Brookfield offers six principles of practice that must be in place:

- 1) voluntary learning;
- 2) respect among participants;
- 3) collaboration between learners and facilitators;
- 4) a focus on praxis;¹⁴
- 5) facilitation that fosters critical thinking; and,
- 6) facilitation that nurtures self-directed, empowered adults.

(Brookfield, 1986)

It is worth noting with respect to this last point that the intrinsic value of the student's experience to the learning process is one of the foundational assumptions of andragogy. In fact, all of these principles are reiterative of Knowles' model.

An often-overlooked aspect of adult education is the institutional needs that influence it. Knowles discusses these aspects of institutional requirements and how they may affect adult learning:

Much adult education takes place under the auspices of institutions, and adult educators are employed by institutions. These institutions, too, have needs and goals that help to define the adult educator's mission. At least three sets of these needs and goals can be served, and in some ways served best, by adult-educational means: 1. *The development of individuals in the institution's constituency in the direction of the institution's goals for them....* 2. *The improvement of institutional operation [and]* 3. *The development of public understanding and involvement.* (Knowles, 1980)

The institution is integral to the andragogical process. It is not just an end user. It inspires its people to undertake learning in an adult environment enabling them to learn the necessary tools for continued learning outside of the organization.

¹⁴ Praxis is a concept from Brazilian educator Paulo Freire: "...a continuous and alternating process of investigation and exploration, followed by action grounded in this exploration, followed by reflection on this action, followed by further action, and so on." (Brookfield, 1986)

A key aspect of andragogy is that it is a student-centered framework. For the student, learning must have some recognizable added value to the student's personal or professional situation. The community relies on adult learning to teach its citizens to challenge accepted practices and ideas to ensure their continued validity. It is a multifaceted process to engage adults in learning. One critical and basic aspect of the andragagogical model is the self-directedness of the adult learner. "Self-directed learning in adulthood, therefore, is more than learning how to apply techniques of resource location or instructional design. It is, rather, a matter of learning how to change our perspectives, shift our paradigms, and replace one way of interpreting the world by another." (Brookfield, 1986)

Brookfield distinguishes between two forms of self-directed learning. The first is the mechanics of learning, the ability of an individual to manipulate them for his own end. Knowles supports the concept of ownership. "Autonomy means taking control of the goals and purposes of learning and assuming ownership of learning." (Knowles, Holton and Swanson, 1998)

The second form that can also be supported by Knowles' concept of ownership of learning deals with the more esoteric idea of striving for Maslow's self-actualized state of being. Brookfield also supports this. "Put briefly, self-directed learning in this second sense occurs when learners come to regard knowledge as relative and contextual, to view the value frameworks and moral codes informing their behaviors as cultural constructs, and to use this altered perspective to contemplate ways in which they can transform their personal and social worlds." (Brookfield, 1986)

2. Other Influences on Adult Learning

The idea that adult learning needs to create questioning and critical thinking is also part of J. Mezirow's Transformational Learning Theory. (Cranton, 2002) Patricia Cranton uses this theory in her study of transformative learning environments. "Critical reflection is the means by which we work through beliefs and assumptions, assessing their validity in the light of new experiences or knowledge, considering their sources, and examining underlying premises."

(Cranton, 2002) Cranton then takes the premise of Transformational Learning Theory to develop “seven facets” of promoting a transformative learning environment (see Table 1). (Cranton, 2002) Her seven points draw a clear picture for a facilitator as to how the learning environment should affect the learner and what should occur in that environment. Self-directed learning is a cyclical undertaking that is intended to develop critical thinking as well as enhance skill and knowledge. Its goal is to create life-long learners rather than better-trained individuals.

In his development of andragogy, Knowles also used Lindeman’s work from the late 1920s. It specifically looked at learning through the artistic stream. The artistic stream purports that learning uses intuition and analysis of experience to create internal change. It elaborates on the concept that adults’ experiences are crucial elements to their learning and that if these experiences are ignored or devalued, the adult will not engage in any learning activity. Lindeman addresses adult learning both from the learner’s perspective and as viewed through the process:

In short, my conception of adult education is this: a cooperative venture in nonauthoritarian, informal learning, the chief purpose of which is to discover the meaning of experience; a quest of the mind which digs down to the roots of the preconceptions which formulate our conduct; a technique of learning for adults which makes education coterminous with life and hence elevates living itself to the level of adventurous experiment.... (Knowles, Holton and Swanson, 1998)

Not only does Lindeman embrace the experiential aspect of learning but suggests that learning is a means of self-betterment. His assumptions about adult learners lead to a framework of five distinct aspects of the adult learner that Knowles synthesized in *The Adult Learner* 1998. According to Knowles, Lindeman’s key assumptions are that “[a]dults are motivated to learn as they experience needs and interests that learning will satisfy.... Adults’ orientation to learning is life-centered.... Experience is the richest source for adults’

learning.... Adults have a deep need to be self-directing...[and] [i]ndividual differences among people increase with age." (Knowles, Holton and Swanson, 1998) These five assumptions are the foundation of andragogy.

Table 1 Cranton's Seven Facets of a Transformative Learning Environment

1. An activating event that typically exposes a discrepancy between what a person has always assumed to be true and what has just been experienced, heard or read
2. Articulating assumptions, that is, recognizing underlying assumptions that have been uncritically assimilated and are largely unconscious
3. Critical self-reflection, that is, questioning and examining assumptions in terms of where they came from, the consequences of holding them, and why they are important
4. Being open to alternative viewpoints
5. Engaging in discourse, where evidence is weighed, arguments assessed, alternative perspectives explored, and knowledge constructed by consensus
6. Revising assumptions and perspectives to make them more open and better justified
7. Acting on revisions, behaving, talking, and thinking in a way that is congruent with transformed assumptions or perspectives

Source: From Cranton, 2002

Constructivism is another strong influence on adult learning. Daniel D. Pratt, in his discussion on how well good teaching methods can be translated from one person to another, includes the constructivist orientation, which supports the idea that learners use existing knowledge to filter and interpret information. (Pratt, 2002) It suggests that "...the primary goal of education or

training is to develop increasingly complex and sophisticated ways of reasoning and problem solving within a content area or field of practice.” (Pratt, 2002) This shows a developmental aspect of learning that not only increases the person’s ability to perform a certain task or more and different tasks but, also, his ability to create innovative solutions to increasingly complicated problems. This is a critical element of adult learning.

Abraham Maslow, a contemporary of Knowles, wrote in the 1950s: “Once lower needs are satisfied, individuals are motivated by higher needs of belongingness, esteem, and self-actualization.” (Bolman and Deal, 1997) This reinforces that, particularly in the United States, adults are self-directed and need ownership of both the process and content to learn effectively. Adult education affords organizations the opportunity to both develop and improve their personnel’s competency to accomplish the organization’s mission and, also, to allow their personnel to develop individually and grow personally, creating a more wholly developed person.

Carl R. Rogers’ research into personality and behavior supports Knowles’ andragogical model. Rogers developed five hypotheses for “student-centered teaching.”

Rogers’ student-centered approach to education was based on five “basic hypotheses,” the first of which was: We cannot teach another person directly; we can only facilitate his learning.... [Secondly,] A person learns significantly only those things which he perceives as being involved in the maintenance of, or enhancement of, the structure of self. [The third and fourth hypotheses are grouped together] Experience which, if assimilated, would involve a change in the organization of self, tends to be resisted through denial or distortion of symbolization, and the structure and organization of self appear to become more rigid under threats and to relax its boundaries when completely free from threat.” [Finally, the last addresses education specifically.] The educational situation which most effectively promotes significant learning is one in which (a) threat to the self or the learner is reduced to a minimum, and (b) differentiated perception of the field is facilitated.” (Knowles, Holton and Swanson, 1998)

These hypotheses support the basic tenants of andragogy. Knowles points out that “[b]oth Maslow and Rogers acknowledge their affinity with the works of Gordon Allport...in defining growth not as a process of “being shaped,” but a process of “becoming.” (Knowles, Holton and Swanson, 1998) One of the key elements of this influential work is that it is concerned with the process rather than the product. Pedagogy focuses on the product, the task accomplishment, the ability, while andragogy includes process as an important piece to support the personal growth of the adult learner. As Knowles writes, some theorists such as B. F. Skinner, Jerome Bruner, R. M. Jones and others look at learning as a means to modify behavior while others see behavior modification as a means to increase the student’s level of thinking and acting. “Clearly, these learning theorists (and most of their precursors and many of their contemporaries) see learning as a process by which behavior is changed, shaped, or controlled. Other theorists prefer to define learning in terms of growth, development of competencies, and fulfillment of potential. (Knowles, Holton and Swanson, 1998) The JUBILEE Popular Education Center in Raleigh, North Carolina developed twelve learning tasks called “Lewin’s Dozen” (see Table 2). The dozen represents a unifying concept to understand what the student experiences. (Vella, 2002) The Nottingham Group and Knowles addressed student-teacher and environmental aspects of the process. JUBILEE focuses entirely on the student. Its premise is that a complete evaluation of any program requires an in-depth understanding of what will occur to the student and within the student. Without this understanding, the evaluative process will be incomplete and, therefore, less useful or useless. Lewin’s Dozen represents an extensive process that endeavors to clarify the activity that occurs in adult learners when learning is successful. Unlike the pedagogic model, andragogy recognizes the need to allow adults to bring their own uniqueness with them to the learning forum. Many researchers besides Knowles, including Brookfield and Rogers suggest this. “All learners perceive and codify stimuli in an individual, idiosyncratic fashion, and to that extent all learning activities are characterized by a degree of independence.” (Brookfield, 1986)

Table 2 “Lewin’s Dozen”

1. Effective learning will affect the learner's cognitive structures, attitudes and values and perceptions and behavioral patterns. That is, it always involves cognitive, affective and psychomotor factors....
2. People will believe more in knowledge they have discovered themselves than in knowledge presented by others."
3. Learning is more effective when it is an active not a passive process.
4. Acceptance of new ideas, attitudes and behavioral patterns cannot be brought about by a piecemeal approach-one's whole cognitive/affective/behavioral system (ideas/feelings/actions) has to change.
5. It takes more than information to change ideas, attitudes and behavioral patterns.
6. It takes more than first hand experience to generate valid knowledge.
7. Behavioral changes will be temporary unless the ideas and attitudes underlying them are changed.
8. Changes in perception of oneself and one's social environment are necessary before changes in ideas, attitudes and behavior will take place.
9. The more supportive, accepting and caring the social environment, the freer a person is to experiment with new behaviors, attitudes and ideas.
10. For changes in behavior patterns, attitudes and ideas to be permanent, both the person and the social environment have to change.
11. It is easier to change a person's ideas, attitudes and behavioral patterns when he or she accepts membership in a new group. The discussion and agreement that takes place within a group provides a personal commitment and encouragement for change that is not present when only one person is being changed.
12. A person accepts a new system of ideas, attitudes and behavioral patterns when he or she accepts membership in a new group. New groups with new role definitions and expectations for appropriate behavior are helpful in educational efforts.

Source: From Vella, 2002

C. FACILITATION

The art of facilitation is becoming of greater interest to researchers. It is the facilitator who will teach and guide the adult to a self-directed state of learning. “R. M. Smith, for example, has spent the last two decades developing a theory and practical repertoire of training exercises premised on the idea that it is as important to teach adults how to learn as it is to specify particular curricular domains for learning.” (Brookfield, 1986) It is easy to confuse lecture with questions for facilitation.

According to Jane Vela, facilitation is an entirely new role for former teachers to undertake. “... [T]he new role of the “professor” is to prepare and set the learning task and to mentor the learners as they share their results. The new role of the professor in teaching as dialogue is as a resource person, a designer, and intense researcher, a listener, a clarifier, a celebrator, and a summarizer.” (Vella, 2002) The facilitator needs to become comfortable with challenging the students’ values and assumptions as well as guiding them through the curriculum. Facilitators need to be comfortable challenging the students’ values and assumptions. This may be uncomfortable for students new to the andragogical process and will likely cause conflict, calling on entirely new skill sets for the facilitator.

Brookfield lists four characteristics that A. M. Tough identified as necessary for effective facilitators. Tough refers to facilitators as helpers. His four characteristics would make for the “ideal” helper:

They are warm, loving, caring, and accepting of the learners. They have a high regard for learners’ self-planning competencies and do not wish to trespass on these. They view themselves as participating in a dialogue between equals with learners. They are open to change and new experiences and seek to learn from their helping activities.” (Brookfield, 1986)

Further, Brookfield cites research indicating that adults need interaction with other learners, in a self-directed learning environment in addition to reflection and says, “Successful self-directed learners appear to be highly aware of context in the sense of placing their learning within a social setting in

which advice, information, and the skill modeling provided by other learners are crucial conditions for self-directed learning." (Brookfield, 1986)

Knowles feels that it is important for facilitators to understand individual differences to achieve the conditions needed for successful self-directed learners to have the interaction and context necessary for learning. With an understanding of individual differences, the facilitator can tailor adult learning experiences through the application of principles to fit adult learners' cognitive abilities and learning-style preferences; by knowing which of the core principles are applicable to a specific group of learners; and expanding the goals of learning experiences. In this manner, the facilitator uses a very flexible approach and andragogy can be applied in many different ways. (Knowles, Holton and Swanson, 1998)

Brookfield notes that Praxis is critical for the facilitator to use, too. The facilitator needs to embrace this cycle of learning and evaluation. In other words, as facilitators present their own ideas to learners, they also invite scrutiny and are open to revising their ideas as a result of learner criticism. (Brookfield, 1986)

Thus, facilitation diverges significantly from traditional instruction. An accomplished facilitator evaluates and re-evaluates information and ideas as much as the student. The traditional hierarchy of teacher – student is replaced with one of mutual respect and exploration of ideas and attitudes.

As noted earlier, andragogy is consistent with a constructivist view of learning in which learners use existing knowledge to filter and interpret information. (Pratt, 2002) D. D. Pratt stresses the need to build on existing knowledge. It implies that the facilitator must be able to truly value the student's experiences. "According to Simpson (1980), the two distinguishing characteristics of adult learning most frequently advanced by theorists are the adult's autonomy of direction in the act of learning and the use of personal experience as a learning resource." (Brookfield, 1986)

Knowles believes the facilitator must be able to see value in the student's ability to self-determine the content and methods used to learn as well as the student's personal experiences. In this way the adult learner enters into a

collaborative activity that completely involves the student as a responsible adult. This is in contrast to the pedagogical model in which the student is in a completely subordinate position to the teacher. Knowles et. al. say that

Even in learning situations in which the learning content is prescribed, sharing control over the learning strategies is believed to make learning more effective. Engaging adults as collaborative partners for learning satisfies their "need to know" as well as appeals to their self-concept as independent learners. (Knowles, Holton and Swanson, 1998)

In contrast to the classic pedagogical structure, the andragogical process needs an environment in which student and teacher share responsibility for all aspects of the process. The responsibility includes involvement in both content and structure of the learning process. Knowles says:

In an adult class the student's experience counts for as much as the teacher's knowledge. Both are exchangeable at par. Indeed, in some of the best adult classes it is sometimes difficult to discover who is learning most, the teacher or the students. This two-way learning is also reflected in the management of adult-education enterprises. Shared learning is duplicated by shared authority. In conventional education the pupils adapt themselves to the curriculum offered, but in adult education the pupils aid in formulating the curricula.... Under democratic conditions authority is of the group. (Knowles, Holton and Swanson, 1998)

The Nottingham Andragogy Group in 1983 created a process that addresses the learner and the facilitator, as well as the learning environment. The Nottingham Andragogy Group's framework for facilitating learning in adults has "[t]welve salient features [that] are identified as essential to the andragogic process: a non-prescriptive attitude, issue-centered curricula, problem posing, praxis, continuous negotiation, shared responsibility for learning, valuing process, dialogue, equality, openness, mutual respect, and integrated thinking and learning." (Brookfield, 1986) According to Stephen Brookfield, the Group also found evaluation a critical element in successful adult learning. (Brookfield, 1986)

Grow's Stages of Learning Autonomy show that adult students may need significant development before they are capable of engaging in a completely

participative learning process. His model starts with a dependent student for which the teacher is an authority and coach. As the student matures and begins to exhibit interest as a student rather than passively accepting what the teacher gives, the teacher becomes more of a motivator and guide. As the student becomes completely involved, the teacher is a facilitator; and, finally, when the student achieves true self-directedness, the teacher acts as a consultant and delegator. (Knowles, Holton and Swanson, 1998)

D. CRITICISMS OF ANDRAGOGY

Sharan B. Merriam suggests that the study of self-directedness actually criticizes some of andragogy's premises. (Merriam, 2001) Knowles agrees with this perspective because not all adults fit the assumptions. He says, "Any facilitator of adult learning will tell you that adult learners are not as homogeneous as the andragogical model implies." (Knowles, Holton and Swanson, 1998) Knowles addresses this criticism in the context of self-directedness in the learning environment when he says that "[t]he assumption that all adults have full capacity for self-teaching and personal autonomy in every learning situation is generally not accepted." (Knowles, Holton and Swanson, 1998)

Brookfield, too, presents numerous concerns about the efficacy of andragogy when he suggests that a focus on the autonomous or independent nature of such learning may ignore the role of important external factors. He notes:

In speaking of the self-directed learner, it is all too easy to presume that such an adult is wholly in control of the learning adventure. Indeed, such individual hegemony over learning is sometimes posited as the chief characteristic of self-directed learning. It is evident, however, that no act of learning is fully self-directed if this is taken to mean that the learner is so self-reliant that he or she can exclude all external sources or stimuli." (Brookfield, 1986)

Brookfield cites field observations that support group interaction as being a key element of successful adult learning. "Almost without exception those who have been involved in introducing self-directed learning techniques into formal

institutions report that, far from being involved in an isolated, single-minded pursuit of individualized objectives, self-directed learners rely heavily on peer learning groups for support, information exchange, stimulus through new ideas, and locating relevant resources." (Brookfield, 1986)

Further, Brookfield cites field evidence that students have a strong disinclination to accept the responsibility of self-directed learning. In fact, he suggests that students may actively resist the efforts of educators to give them control over their learning. But, this may change later in the process. (Brookfield, 1986) Specifically, "...the majority of learners and facilitators end up approving the introduction of techniques of self-directed learning." (Brookfield, 1986)

After criticizing what he understands as autonomy, Brookfield then suggests another definition to better describe the activity of an adult learner. "The dangers of equating control over techniques of learning with autonomy have also been recognized by Chene, who concurs that "to be resourceful and to be independent do not equal the achievement of autonomy.... Learning to be a good disciple, to be an efficient bureaucratic functionary, or to be an exemplary political party member are all examples of projects in which the techniques of self-directed learning may be evident. In none of these projects, however, is there exhibited critical thought concerning other alternatives, options, or possibilities." (Brookfield, 1986) This definition of autonomy supports praxis.

Thus, Brookfield emphasizes that autonomy in personal and professional life is rare. However, he goes on to insist that developing that autonomy is an immensely important product of adult learning. [The]... rarity [of autonomy], however, in no sense weakens the view that the enhancement of self-directedness is the proper purpose of education; instead, it provides a compelling reason why educators should pursue this end with unflagging zeal." (Brookfield, 1986)

Another criticism of self-directedness is based on the field measurement process because those who have been studied have been predominantly middle class. "The middle-class nature of the groups of adults assembled as samples of self-teachers, self-directed learners, or autonomous learners is one of the

strikingly inconsistent features of research studies in this area." (Brookfield, 1986) This group tends to also be better educated.

A final criticism of andragogy centers around the issue of whether or not it is a theory. Specifically, there is some debate about whether or not there can be a unifying psychological theory that translates to adult learning. Knowles takes a good deal of time to define theory. He starts with the five definitions from *Webster's Seventh New Intercollegiate Dictionary* that range from "...the analysis of a body of facts in their relation to one another [to] abstract thought." (Knowles, Holton and Swanson, 1998) Knowles goes on to express the wide disparity among theorists and authors as to what the definition is. "Learning theorists use all five of these definitions in one way or another, but with wide variations in their usage.... It seems that most writers in this field don't expressly define the term theory, but expect their readers to derive its meaning from their use of the term. Torraco informs us that "a theory simply explains what a phenomenon is and how it works." (Knowles, Holton and Swanson, 1998)

This sets the stage for Knowles' very practical application of the adult learning processes and their framework. Knowles points out that not all psychologists accept that there can even be a theory for the responses and actions of large numbers of people. (Knowles, Holton and Swanson, 1998) For example, he cites other psychologists such as R. M. Gagne and B. F. Skinner, whose premise is that adult learning cannot be expressed in a single theory and that it is misleading to attempt to do so.

Others, such as Merriam and Ross-Gordon see andragogy as a theory in progress. For an adult learning organization, however, andragogy needs to be a useful tool to accomplish adult learning in the most effective way. As Knowles, himself, points out, "[t]he appropriate question to ask, I think, is "What research has been done to indicate under what conditions the andragogical model is appropriate, in whole or in part?" (Knowles, 1980)

In his final revision, published posthumously, Knowles dearly states the best use of the model. "The andragogical model is a system of elements that can be adopted or adapted in whole or in part. It is not an ideology that must be

applied totally and without modification. In fact, an essential feature of andragogy is flexibility...." (Knowles, Holton and Swanson, 1998)

L. G. Bolman and T. E. Deal discuss a four-frame model in an organization to illustrate each frame must be understood in context. "The overview of the four-frame model ...shows that each of the frames has its own image of reality." (Bolman and Deal, 1997) They also point out that the frame is a tool to be used not adapted to. "Frames also become tools, each with its strengths and limitations. The wrong tool gets in the way." (Bolman and Deal, 1997) Therefore, in keeping with Knowles' perspective that andragogy is a model to apply and employ as necessary, depending on the situation, the most effective model for any adult learning environment is one that has all the aspects of the andragogical process, including the pedagogical model, and uses applicable pieces for each learning event, similar to Carl Clausewitz' economy of force. Use what is needed; where it's needed; when it's needed, not a bullet more, not a bullet less.

The collection of ideas expressed by Knowles and others—whether or not they can be described as one valid theory—have provided a useful framework for many years to guide adult learning. As such, the framework provides an appropriate foundation for comparison to the Navy curricula, which is the focus of this research. The final section of this chapter summarizes the key aspects of the andragogical process.

E. A COMPOSITE FRAMEWORK OF ADULT LEARNING

1. Characteristics of Adult Learners and the Adult Learning Environment

a. *Student*

According to many including Knowles, Brookfield, Cranton and The Andragogy Group, learning must have a recognizable value to the students' personal or professional situation that supports their self-concept of being responsible decision makers and successful adults who have valuable experience. Students need some event that reveals a discrepancy in some assumption the students have. The students need a social environmental

change in order for the change in the assumption to take place. Finally, the students move toward critical thinking that transcends technical training allowing the individual to solve ever more complex issues.

b. The Environment

The student must engage in praxis, critically analyze the concepts and discuss the issues thoroughly with other students, for real change to occur. The environment, for this to occur, needs to be open and accepting of the student's thoughts and ideas without undue negative input from the other participants. True change will occur when the student's environment has changed and the student has released any emotionally held preconceptions that hinder the practical and reflective process of praxis.

2. Characteristics of Facilitators of Adult Learning

The facilitator more than anything else is a change agent. This is the person who will develop and guide the student to a position of self-directedness and empowerment. Knowles developed this perspective that Vela supports. She suggests that the educator is evolving into more than a mentor, someone who guides and encourages the student, but also is now a resource specialist establishing the climate conducive to adult learning, as discussed in the assumptions of adult learning. The facilitator creates an organizational structure for participative planning that diagnoses needs and fosters critical thinking and self-directedness. The facilitator needs to ensure that learning objectives are formulated and lessons developed to support them and, finally, that the lessons are evaluated for effectiveness. Brookfield supports these ideas as he cites Tough who reiterates the peer relationship between the facilitator and the student. Knowles also recognizes the institutional impact on facilitation. It is important that the facilitator understand the institution's mission and how the facilitator can forward that mission. Finally, Grow's Stages of Learning Autonomy follows the same pattern as the facilitator guides the student to a position of self-directedness. Important to Grow is that the educator may need to start in a position of authority with the student in a pedagogical position but quickly moves towards true facilitation.

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III. CURRICULUM

A. INTRODUCTION

This chapter defines the content of the Facilitator Training Curriculum as it pertains to Navy Leadership Training and analyzes how well it supports the Adult Learning Model described in Chapter II. It explores the specifics of the Advanced Officer Leadership Training Course (AOLTC) curriculum from both the perspective of facilitator effectiveness and curriculum appropriateness based on the Model. It also addresses any aspects of the Model that are not properly employed within the curricula.

B. FACILITATOR TRAINING CURRICULUM

The Navy's facilitator training is a five-week course designed to train all Navy personnel assigned as leadership facilitators at Navy training commands around the world. The students range in pay-grade from Second Class Petty Officers to Captains in all designators and specialties. There is classroom and practical training for the students who will be referred to in this thesis as "facilitator students." The classroom training demonstrates the adult learning techniques that are covered in the curriculum along with basic facilitation skills. The topics covered in the five weeks include the following: curriculum maintenance and classroom management skill development; effective communication skills; modeling and maintaining appropriate classroom behavior; valuing diversity for both facilitator and facilitator student; effective skills for co-facilitation including questioning techniques; and, adult learning concepts. Finally, the aspects of the adult learning model developed in the previous chapter that are covered in the Facilitator Training Instructor Guide¹⁵ (FTG) will be addressed in this section.

¹⁵ Facilitator Training Instructor Guide, CIN P-012-0045 v2

1. The Learning Environment

In an adult learning environment, the student must feel comfortable exploring ideas and opinions openly with other students. If there is negative criticism or exclusionary activity occurring against one or more students, the learning will be less effective or not effective at all. The learning environment is strictly monitored at all times in the facilitator-training classroom by the course facilitators. An open atmosphere is maintained by prohibiting any type of discriminatory speech or action including jokes and using gender-neutral references. The facilitator students examine how the values, beliefs, and attitudes of students impact their classmates and how to maximize participation and value diversity by preventing discriminatory statements in the classroom. (Facilitator Training Instructor Guide, p. 2-11-1) Additionally, the student facilitator is taught that any offending or disruptive student also must be treated with respect so as not to disenfranchise that student. The facilitator students are graded on multiple presentations. Their ability to properly control their students' behavior ensuring an open exchange of ideas is part of each graded presentation.

Another technique used and taught at facilitator training is the development of class norms. The facilitator may make suggestions if key norms are left off but it is a student-generated list that has two purposes. It serves to gain buy-in from the students since they developed it, and it sets the basis for a proper environment that the facilitator can use to ensure an open sharing of ideas. These norms include elements such as no retribution, courtesy to whomever has the floor, and maintaining a professional tone at all times. The norms are enforced by both the facilitators and the students ensuring that the classroom environment remains open and supportive. The student development of class norms supports the Adult Learning Model's characteristic that adult learners need to feel self-directed and valued.

2. Valuing Student Experience

The facilitator training curriculum stresses the importance of using student experience to draw connections between the material and their own lives.

(Facilitator Training Instructor Guide, p. 1-15-37) This embraces the idea that adults have valuable experiences to enhance the learning process. The curriculum further delineates that the facilitator students will be able to demonstrate the use of “students as resources” to generate participation and to enhance learning. The facilitator students learn techniques to connect subject matter to student experience. The curriculum stresses valuing student experience creates more effective learning. (FTG, p. 1-15-43) It also suggests that by sharing student experiences, key points are made by the students themselves reinforcing the peer learning environment that supports self-directed learning. The students put the learning point into their own context giving them greater ownership and deeper understanding of the material. Further, the other students gain greater insight from their peers in a collaborative manner. The facilitator is prepared with examples for the particular learning point but first tries to draw out student experiences to illustrate the point. (FTG, p. 1-15-46) If every teaching point is addressed, the facilitator moves on. If the class missed something, then the facilitator can wrap up the discussion with a line of questioning that gleans any missing elements of the learning point.

3. The Importance of Relevance of the Material to the Student and Constructivism

The facilitator training curriculum delves into the basic aspect of constructivism. It explains to the facilitator student that the most effective way of promoting real learning is to connect the new material to something that the student already knows. (FTG, p. 1-15-13) This is done in the context of asking probing questions to ascertain the existing level of understanding and possible misconceptions. Linkages are emphasized. The facilitator curriculum refers back to andragogy emphasizing the importance of bridging the classroom material to the students’ needs in order to motivate them.

Further, the facilitator student is reminded to explain the relevance of the material. (FTG, p. 1-15-42) This is often accomplished with a motivating statement at the beginning of a lesson. For example, the facilitator may ask for a show of hands as to how many students in the class neglect something important

because of lack of time. Most of the students will usually raise their hands. The facilitator will then point out that improved time management will help them better accomplish their mission. The students remembers an instance when they were in a time crunch and can begin to relate the material being presented with their past actions. This draws the link from the new material to the previous experience and gives relevance to the subject matter. A training tool used in the facilitator training curriculum is the Relevant, Interesting, Satisfied, Expectation (RISE), Model of Student Motivation (Brophy, 1998; Hootstein, 1996; Wlodkowski, 1993). (FTG, p. 1-3-19) It uses the acronym RISE to remind facilitators that adult students need to know the objectives of the course, the relevance of those objectives and how the learning process will be conducted. The learning process needs to be interesting to the students and satisfy a need of theirs while imparting an expectation of success. (FTG, p. 1-3-20) If these conditions are met, it is more likely that learning will occur.

4. Critical Thinking

The facilitator training curriculum links collaborative learning to critical thinking. There are five elements of collaborative learning, which emphasize the creativity and problem solving skills of groups over individuals. The curriculum also teaches that retention is increased because the students are self-directed in collaborative, task-oriented learning activities. (FTG, p. 2-3-12) The emphasis is on the facilitator to use thought-provoking questions to engage the students to use more in depth, critical thinking to solve problems. The desired end state is that the facilitator is able to model the questioning process to enable the students to frame their own questions and understand their own thought processes over and above factual information. (FTG, p. 1-15-16) This uses a line of questioning that asks why a certain choice was made with follow on questions probing how the students arrived at the particular conclusion. This line of questioning helps create a thinking process rather than short responses to lists of facts.

5. Responsible Decision Makers

The facilitator-training curriculum offers methods to address the adult learner's need for autonomy. The concept presented in the curriculum is that

offering minor choices to students satisfies their need for autonomy. The intent is for students to take responsibility for their learning as they feel greater control. (FTG, p. 1-15-44) The suggestion is that the students are offered alternative choices for activities such as how to brief a presentation to the class. They may decide to write on a chart pack or create a PowerPoint presentation. In this instance, autonomy appears to have been redefined in the facilitator-training curriculum. The concepts of autonomy and self-directedness are not fully covered by the FTG. Self-directedness involves a great deal of collaboration on the part of the student with the facilitator to develop the learning process. This includes an evaluation to determine what learning objectives should be pursued and the process by which they will be pursued. Autonomy is a very involved, collaborative undertaking.

Grow (Knowles, Holton and Swanson, 1998) suggests that the facilitator may have students not yet prepared for self-directedness. The facilitator does, however, have the responsibility to guide them toward self-directedness. The curriculum does not address this issue. There is no expectation that beginning with the small steps of allowing the students to choose which form of presentation to use will develop them into more autonomous students taking a greater role in their learning process. The suggestion is incorrectly presented as a means to satisfy an adult's need for autonomy.

6. Conclusion

Navy facilitator training incorporates many adult learning concepts. It does not fully embrace the complete adult learning process. Students are not involved in the development of the lessons, nor the methods to attain the learning objectives. The method addressed in the FTG affords neither the facilitator students nor the leadership students the opportunity to decide what learning objectives to pursue. It does, however, create a classroom environment that is significantly different from the traditional pedagogical model of instruction and a great deal closer to the andragogical model than traditional Navy schools.

C. ADVANCED OFFICER LEADERSHIP TRAINING COURSE, CORONADO

The curriculum at Center for Naval Leadership Learning Site (CNLLS) Coronado supports a great many of accepted adult learning practices. It takes the basic training from facilitator training and builds on it to support the needs of the particular group of students, specifically Lieutenant-Captain-grade Naval officers in a nine-day course. The facilitators assigned to the CNLLS Coronado employ the skills learned at facilitator training while presenting the Advanced Officer Leadership Training Course (AOLTC) curriculum. As with all the leadership courses, there are four foundational themes: values; responsibility, authority, and accountability of leadership; unity of command, Navy and services; and, risk management/continuous improvement.¹⁶ The curriculum is a blending of leadership and management techniques that are presented at a level for what is called “advanced officers.” These are primarily Lieutenant Commander and Commander students with a few Lieutenants and some Captains. The curriculum is geared to the Department Head and Officer-in-Charge positions. Among the students, many medical officers attend who may not be assigned to Department Head positions. Since many medical officers have very few leadership opportunities until they are very senior, the medical community uses this course as a means to develop leadership skills. Unless the information is footnoted, all data in this chapter are direct observations of the thesis student.

1. Environmental Practices Supported by the Model

a. *The Facilitator Ensures an Appropriate Learning Environment*

The first two hours of the first day of the class deal with administration and introductions. The facilitators help the students with the standard Navy administration required of any Navy check-in process. The classroom is set up prior to the students’ arrival and to help set the tone for the class. Prior to arrival, each student is made a name card that is displayed on the table so that there is an assigned seat. The student will also have a copy of the student guide, the course schedule, a critique form, and an introduction form.

¹⁶ Leadership Continuum April 2004, www.cnet.navy.mil/leadcon.html

The students are assigned seats based on their rank and designator to allow for interaction between people with different backgrounds and different experiences. The students will then be briefed by one of the facilitators who explains that the course is facilitated, meaning that their experience and participation is a crucial element of the course. In this way, the students understand what is expected of them and are encouraged to embrace this aspect of adult learning. Following the administrative brief, students and staff are introduced.

The facilitators introduce themselves, including career and personal backgrounds. The students have approximately fifteen minutes to fill out a form that asks pertinent questions geared to find out their backgrounds, interests, and expectations of the course. The students then introduce each other based on the information on the form and their conversation. The last step of the check-in process is creating class norms.

One facilitator will solicit input from the class and list the norms in the same manner as facilitator training. This list is then posted on the classroom wall as a reminder. These norms will always include courtesy to other's ideas and what is referred to as a "wardroom" atmosphere. This encompasses both respect towards all members of the group and a sense of camaraderie that creates some security to ensure that what is said in class will not be repeated outside of it. This enables ideas to flow more freely without fear of retribution.

(1) The facilitator creates a classroom climate that values student experience.

There are two primary reasons why climate is important. It satisfies the need adult learners have to know that their experiences are important and it supports constructivism in order for the students to better learn new material by integrating it with prior knowledge. There are two techniques used extensively in the course to satisfy these needs. One is the use of student experience to illustrate teaching points. The facilitator presents some piece of information and then asks a question that allows the students to offer their experience to reinforce and illustrate the point. For example, the facilitator introduces Stephen Covey's Four-Quadrant Time Management System. The

facilitator then asks the class to give examples of activities that belong in each quadrant. This serves to reinforce the types of activities that belong in each category and to bridge their prior knowledge to the new concept. It also serves to generate discussion as to the students' opinions on what activities belong in which quadrants.

Another use of student experience is to illustrate concepts based on some past event. An example of this is the "planning exercise." Half the students, as a group, list all the elements of a plan. The other group lists the characteristics of an effective plan. The facilitator monitors each group to ensure that all aspects of both questions are covered. If any are missed, the facilitator asks questions to draw the specific information from the group. The final step of the exercise is for the group to choose one of their experiences to illustrate all their points. In this way, the class hears a real story that creates a picture of the process instead of a list of points they will easily forget.

(2) The facilitator fosters a peer relationship between the facilitator and the students.

A unique aspect in this school is an outgrowth of the "wardroom" atmosphere. Students are allowed to refer to each other and the facilitators by their first names. It is not something, however, that is emphasized. Many juniors still refer to senior officers by rank. Due to the nature of the military, it is left up to the students and the facilitators to use whichever form of address is more comfortable for them. It does, however, add another dimension to the class. There is not a true peer relationship between all the students and the facilitators. It is certainly very relaxed, but rank does exist in the minds of the students, even if it is not enforced by the facilitators. Based on observation, this does not appear to severely inhibit disagreement with the facilitator on the part of the more junior students.

(3) The facilitator creates an environment conducive to praxis.

The course is designed to encourage discussion between the students to better explore the ideas presented. The students are free to discuss any and all aspects of the learning points. Exercises and videos are used to reinforce the principles but there is no reiterative process. For example, a clip from *Gettysburg* is shown following the section on counseling. It is a scene in which General Lee counsels General Stewart after Stewart's failure to execute his assigned mission. Following the video, the facilitator asks the students to express all the counseling aspects that were represented in the video and why they were valuable to the situation. The facilitator then has the class draw conclusions on the value to their own mission of using these techniques. This process does not however fulfill praxis. Even the Visual Audio Kinesthetic (VAK) Model exercise where there are observers watching the eye placement of classmates to try and determine which method they use for recall does not support praxis. There is no reiterative process that includes discussion, thought, and action.

b. The Facilitator Respects the Students as Responsible Decision Makers

There is very little opportunity for choice on the part of the student in the AOLTC, Coronado curriculum. The one significant allowance is the preparation for the "Capstone" exercise. The students are allowed to decide among themselves whether to have a working lunch or reconvene after lunch to prepare their class briefs. The course is time constrained and the exploration that may be required for students to decide alternatives would require additional time in the schedule. Furthermore, it would take time for the students to acclimate to the curriculum to be able to make informed decisions. The length of the course is prohibitive. Even if the AOLTC Coronado curriculum had some allowance for this, it would fail to accurately address adult learning student choice. The curriculum for the course is set by the Center for Naval Leadership (CNL). There is no opportunity for students to make substantive choices in the learning process or content.

2. Facilitator Activity Supported by the Model

a. *The Student Recognizes the Value of the Material*

The strongest tool the facilitator has to help the student see the value of the material immediately is the motivational statement. The motivational statement shows how the subject directly relates to the responsibilities assigned to Naval Officers. For example, for the discussion of the Keirsey-Bates instrument that looks at how people gain energy, prefer to receive information, tend to make decisions, and prefer to perform tasks, the facilitator suggests that building dynamic teams that are fully engaged and properly used creates a synergistic organization that is flexible allowing it to accomplish the mission in a highly effective manner. The facilitator suggests that teambuilding is a primary responsibility of Naval leaders and by knowing how both oneself and others are affected by these four preferences, the team leader can ensure the highest level of team performance. Throughout the topic, the facilitator solicits ideas on how useful the material is to teambuilding.

b. *The Facilitator Fosters Critical Thinking*

In addition to questioning techniques that solicit student opinions and generate discussion, the course uses case studies to further develop critical thinking. Many of the opinion sections such as *Ethics and Core Values* draw on the student's experience and pose questions of moral dilemmas that encourage analytical discussion. Many students have mentioned to this thesis student that the thought-provoking questions made them delve into possibilities they had not before considered.

The case study can be most effective in developing critical thinking. An example is a case study in which a First Class Petty Officer with 19 years of service tells the Assistant Director of Nursing Services (ADNS) that he is homosexual and chooses not to pretend otherwise any longer. He also assures the ADNS that he will not "mix his personal and professional life with only one year to go until retirement."¹⁷ The students are grouped by table and then asked to discuss the following questions:

¹⁷ Advanced Officer Leadership Training Course Student Guide, CIN P-1B-0006

- (1) Is there an ethical dilemma associated with this situation? Justify your position.
- (2) Should you intervene in this situation? Justify your position.
- (3) Should the fact that the PO1 has 19 years in the service and plans on retiring next year have anything to do with how this situation is handled? (AOLTC Student Guide, p.2-3-26)

Questions like these serve to generate discussion and force the students to include rules and regulations as well as their own philosophical considerations. This creates an awareness of how the officer will approach this type of situation.

c. *The Facilitator is a Resource Specialist*

One important aspect of the facilitator of adult learners according to Vella (2002) is the facilitator as resource specialist. Whereas the Coronado facilitators are expected to be current on Navy policy and appropriate learning processes, there is a limited literary review on the part of the facilitators. They are exposed to many of the leadership and management books that are popular but there is no standard, professional affiliation to keep abreast of the latest research and publications on the subject of leadership and management. There is a recommended reading list that is given to the students compiled by the facilitators, but there is no coherent method to stay abreast of these materials. Facilitators are dependent on what is available to the general population on the matter and these usually refer to civilian business. Further, there is no coherent, continuing study of adult learning. The idea of resource specialist is somewhat fulfilled by the diligence of the facilitators themselves, but it is made difficult without periodic attendance at academic conferences or seminars.

d. *The Facilitator Ensures Course Material is Evaluated for Effectiveness*

The course uses critique forms (see Appendix A) that ask the students to evaluate both the facilitators and the curriculum. The facilitators update these critiques to better assess the success of the curriculum. There was a pilot that sent a follow-on instrument to the students 3-6 months after they left

the course asking them to evaluate the usefulness of the material covered. This process was discontinued pending a complete rewrite of the curriculum and implementation of a Navy-wide instrument to evaluate officer leadership training post graduation. This evaluative process is owned by CNL. The facilitator is an end-user only.

e. *The Facilitator Helps Forward the Organization's Mission*

To date, there is no measurement instrument to determine if the facilitators are successful in supporting the organization's mission. The statement itself is multi-layered. First there is CNL's mission and then there is the Navy's mission. CNL's mission is to develop and deliver leadership training in conjunction with fleet representatives to meet fleet needs.¹⁸ However, due to the unique specificity of CNL's mission to work in conjunction with the fleet, the curriculum is focused to meet those needs. A follow-on measurement instrument will better determine if those needs are being met.

3. Conclusion

Like the Facilitator Training curriculum, the AOLTC Coronado curriculum makes a successful attempt to follow good adult learning practices. There are many aspects of the Model that are adhered to but many that are not. However, in light of the constraints placed on the course and on the facilitators by the organization, it is a successful curriculum as it follows a sound adult learning process.

¹⁸ “NPDC Learning Centers

The primary function of the Learning Centers is to partner with Fleet representatives to define individual human performance requirements for given tasks. Additionally, the Centers are the process owners for the professional and personal growth and development of Sailors by coordinating with the Human Performance Center to develop and deliver the appropriate tools and opportunities to meet Fleet requirements. The Centers are distinguished by their functional area of responsibility, to include both occupational fields and mission areas. Centers are listed with their corresponding ratings, functional areas, and training commands.” (www.navy.mil/link handler)

D. MODEL FACTORS NOT INCORPORATED INTO THE LEARNING PROCESS IN THE ADVANCED OFFICER LEADERSHIP TRAINING COURSE

The AOLTC Coronado curriculum embraces much of adult learning, but there are some key aspects of adult learning that, for various reasons, are not captured in the curriculum. These involve long-term changes in and development of the student, and participative planning that is unrealistic to include because of the requirements of the course and its length. The specifics are addressed in this section.

1. Environmental Practices of the Model Not Incorporated in the Curriculum

In "Seven Facets of a Transformative Learning Environment," Patricia Cranton states that an adult learner needs an event that reveals a discrepancy in what the adult has accepted as fact. (Cranton, 2002) Students attend AOLTC Coronado because they have been told that it is important for their promotion or that it is a good course to attend to show extra initiative. Occasionally a student expresses a desire to learn good leadership techniques because of a self-perceived lack of leadership experience but during the course, students experience incremental changes to their perception of leadership and management, and the tools to lead and manage. For example, if a student does not embrace for example Stephen Covey's concept of time management, it is unlikely that anything will completely change that perspective. The most change that occurs is a willingness to look at the material again and accept the possibility that some aspects of the system may be useful in some instances. Another important developmental change affected by the short duration of the course is the need for the student's self perception and environment to change. Lewin believes this must happen before changes in attitudes and behaviors can occur. (Vella, 202) The learning in the class is entirely incremental, increasing leadership and management tools in the students' repertoire but not instilling a dramatic change in their perceptions.

2. Model Activities Not Incorporated in the Course

Participative planning is a key element to the adult learning Model. Adults in a self-directed learning process need to be part of the decision process deciding what will be learned and how it will be learned. (Vella, 2002) The facilitator should ensure the learning objectives are formulated based on diagnoses of the adult learner's needs and that the lessons properly support those learning objectives. (Vella, 2002) The structure of the organization and the basic nature of a 9 day Navy course preclude this process. Time prohibits involving the students in developing lessons based on their respective diagnoses. There are certain, basic principles and facts that the organization wants imparted to the student. If the student is already practicing the proper techniques, the intent is to use the course to refine and sharpen these skills and attitudes.

The future of e-learning may, in fact, support the diagnostic process to some degree. The on-line courses that may become a prerequisite for the course have diagnostic tools in place. In that regard, there will be some student control over what is learned and when. The facilitator also has the ability to recommend changes to the Course Managers at CNL. In this way, the curriculum can be responsive to student recommendations after the fact.

E. CONCLUSION

The facilitators and AOLTC Coronado curriculum support many of the practices of the Adult Learning Model. There are institutional and personal constraints that preclude some of the key aspects of the Model. In light of the course length and layered structure of the chain of command, the AOLTC Coronado curriculum adheres to the Adult Learning Model to the greatest extent possible.

IV. SUMMARY, CONCULSIONS AND RECOMMENDATIONS

A. SUMMARY AND CONCLUSIONS

This research examined adult learning as it is practiced in two Navy training courses. The history of adult learning, which was derived from the concept andragogy, was described as a foundation for the research. In contrast to “pedagogy” from the Latin root “paid” meaning child and “agogus” meaning leading, it is literally “the art and science of teaching children.” (Knowles, 1980) Knowles initially viewed andragogy as the “art and science of helping adults learn.” (Knowles, 1980) Further research found that secondary and elementary school teachers were finding it applicable in some areas, so he reevaluated it to be “another model of assumptions about learners to be used alongside the pedagogical model....” (Knowles, 1980)

Knowles’ andragogical model is based on the assumptions that adults need to know why they need to learn, that learners have a self-concept of being self-directed, responsible decision makers, their experiences are valuable, they are ready to learn, and they are intrinsically motivated. (Knowles, Holton and Swanson, 1998) Knowles then developed the andragogical process to help facilitators help adults learn. The process discusses what facilitators need to do to be effective. According to Knowles, a facilitator needs to establish a proper climate, create a structure conducive to participative planning, diagnose needs, formulate learning objectives and lessons, facilitate the lessons, and, finally, evaluate the success of the lessons. (Knowles, 1980) There has been a great deal of research done on adult learning. It has yielded additional understanding about both adult learners and the best practices to help them learn.

1. Later Research Findings on Adult Learning

An important learning task requires environmental change for the knowledge to create a new attitude and behavior, not just the student’s perspective. (Vella, 2002) Cranton (2002) also recognized in Cranton’s Seven

Facets of “A Transformative Learning Environment” that there needs to be an “activating event” that shows the student a discrepancy between what he had thought was true and some contradictory experience.

Another aspect of adult learning developed by the Nottingham Andragogy Group in 1983 is that the learning environment needs to be “democratic” and equal. (Brookfield, 1986) This suggests a true peer relationship between the student and facilitator in contrast to the hierarchical relationship between student and teacher in the pedagogical model.

Praxis is another concept that later research found to be integral to adult learning. Praxis is an idea developed by Brazilian educator Paulo Freire in which the student practices a reiterative process of investigation, exploration, action and reflection followed by action based on the reflection. (Brookfield, 1986) Brookfield believes it is imperative that both the facilitator and the student perform this process for learning effectiveness. (Brookfield, 1986)

A strong influence on adult learning is constructivism. Pratt (2002) includes the constructivist orientation in his discussion of translating good teaching methods from one person to another. Constructivism suggests that students take in new information and assimilate it by building on their existing knowledge to incorporate the information into a coherent, useable concept. (Pratt, 2002) Similarly, the JUBILEE Popular Education Center, founded in 1981, developed a set of learning tasks called “Lewin’s Dozen.” Included in these learning tasks is the idea that knowledge is best attained by the student building it rather than receiving it passively. (Vella, 2002)

One of Brookfield’s six principles for facilitators is to foster critical thinking. (Brookfield, 1986) Pratt also supports this by saying that “...the primary goal of education or training is to develop increasingly complex and sophisticated ways of reasoning and problem solving within a content area or field of practice.” (Pratt, 2002) This shows the developmental aspect of learning that increases the student’s ability to create innovative solutions to increasingly complicated problems. This is a critical element of adult learning.

Grow's Stages of Learning Autonomy show that adult students may need significant development before engaging in a completely participative learning process. His model starts with a dependent student for which the teacher is an authority and coach. As the student matures, the teacher becomes more of a motivator and guide. When the student becomes completely involved, the teacher is a facilitator. Finally, when the student achieves true self-directedness, the teacher acts as a consultant and delegator. (Knowles, Holton and Swanson, 1998)

Finally, with respect to the facilitator's approach to the student, Vella (2002) proposes that the new role for facilitators includes acting as a resource specialist. This is in contrast to the role of the traditional educator. With the student participating in all aspects of the learning process, the need for a greater breadth of resources is necessary and it is the role of the facilitator to help the student access these resources.

This research suggests an adult learning model that combines the concept of andragogy and the follow-on research noted above. The Facilitator Training Course and Advanced Officer Leadership Training Course were analyzed using this model.

2. Facilitator Training (FACTRAC) Compliance with the Adult Learning Model

The Facilitator Training course both follows and teaches many important aspects of the adult learning model. It employs a comprehensive approach to teach the proper skills for facilitators. Throughout the five-week course, the facilitators of the course work to create an open environment that values student experience, building on the students' previous knowledge. In the process, the facilitators are careful always to motivate the students to the topic by explaining the value the material has to the student. The facilitator training curriculum also emphasizes questioning techniques that enable facilitators to develop the students' critical thinking skills.

3. Advanced Officer Leadership Training Course (AOLTC), Coronado Compliance with the Adult Learning Model

The Advanced Officer Leadership Training Course (AOLTC) Coronado curriculum embraces all of the same aspects of the model that the Facilitator Training curriculum does. It also supports the aspect of the model that addresses needs of the institution. Intuitively, it can be said that the leadership of the Navy has a tremendous impact on mission effectiveness. Therefore, the advancement of leadership skills in the Fleet serves to aid effective mission accomplishment. There is no measurement instrument to determine if the AOLTC successfully supports the organization's mission, but the process to support the Fleet suggests a possibility that it is appropriately responsive to Fleet needs. While it is the Center for Naval Leadership that controls the curriculum content, its support of Fleet needs enables AOLTC to fulfill its role in support of that mission. The Center is tasked to develop and deliver solutions to Fleet needs working closely with the Fleet. (www.navy.mil/linkhandler) This process directly aids the organization to advance its mission.

4. Facilitator Training (FACTRAC) and Advanced Officer Leadership Training Course (AOLTC) Non-compliance with the Adult Learning Model

While both FACTRAC and AOLTC support some facets of adult learning, they do not completely support the following aspects of the model. First, neither supports the concept of learner autonomy. The model requires a collaborative effort between facilitator and student to develop a learning path to achieve results determined by the student, with the facilitator's guidance. Despite the Facilitator Training Instructor Guide (FTG) discussion of autonomy and its suggestion that minor activities such as providing options for minor classroom activities will fulfill the adult's need for participative planning, it falls far short of the model. The student has no ability to exercise autonomy over the learning process. The curriculum for the course is established by CNL with Fleet input. Reviews and updates are based on input from the AOLTC facilitators but the student has no

direct, and more importantly, individual, input into the learning objectives or learning activities, or by helping to develop the lessons to learn those objectives.

Participative planning is a key element of the adult learning model. The course is nine days long. Time prohibits involving the students in developing lessons based on their respective diagnoses of needs with respect to leadership training. There are certain, basic principles and facts that the organization expects the student to get out of the course. It is unreasonable to expect the exploratory process that autonomy in adult learning demands. The course fulfills the need of either introducing the material to the student or refining and sharpening those skills and attitudes already held by the student.

There is no real “Transformative Learning Environment.” Cranton (2002) states that an adult learner needs a “revealing event” that exposes some discrepancy in what the adult has accepted as fact. There is no event like this for the AOLTC students. They attend for career reasons. They relate to the facilitators that they attend because they understand that attending the course may make them more competitive for promotion or that it may give them some useful tools for their job. Most students, however, do not think they are greatly lacking in many or all of the areas covered.

Also, there is no significant environmental change that allows the student to really change behavior. Lewin believes that this change must happen for changes in attitudes and behaviors to occur. (Vella, 2002) For the most part, the learning appears to be incremental, increasing knowledge of leadership and management skills but not instilling a dramatic change in the students' perceptions.

In Grow's Stages of Learning Autonomy, the students are understood to be at various levels of self-directed development. Many may still feel most comfortable in some type of a pedagogical environment. (Cranton, 2002) According to Grow, it is incumbent on the facilitator to guide the student to a level of greater self-directedness. In light of the lack of opportunity for any type of real autonomy, the courses do not support Grow's perspective, either.

The facilitators do not evaluate the curriculum's effectiveness and make necessary changes. They may make recommendations to the Center for changes. CNLLS Coronado uses an evaluation form (see Appendix A) that the students write throughout the course. The Center will then incorporate the change throughout all the leadership learning sites. This allows for world-wide standardization while maintaining a continuous improvement process for the curriculum, but it does not fulfill the intention of the model that the facilitator is responsible for curriculum modification for the benefit of the students during the course.

With respect to the peer relationship between student and facilitator, AOLTC encourages a "wardroom" atmosphere. FACTRAC does not even attempt this due to the wide range of the students' paygrades. A wardroom environment encompasses respect towards all members of the group and a sense of camaraderie that creates some security that ideas expressed in the classroom will not be repeated outside of it. This enables ideas to flow more freely without fear of retribution. In light of the need for professionalism and to prevent fraternization, the atmosphere is relaxed but rank exists. There is not a true peer relationship between the students and the facilitators. This researcher has noted that it does not seem to stifle discussion on controversial subjects, however, depending on the particular class make-up.

The process of praxis that alternates between exploration, and investigation that is followed by reflection and further action, does not exist. The course facilitators are trained to develop lines of questioning to draw out discussion. There are some readings to give background information on the subject matter, but there is no action and reflection and it is certainly not a reiterative process.

The role of the facilitator as resource specialist is very limited. Facilitators are dependent on what is available to the general population on the subject of leadership and these articles usually pertain specifically to business. It should be pointed out that CNL, in its ongoing effort for improvement, established a chat room for facilitators to discuss issues and concerns and share ideas. There is

also a reading list that is available to both facilitators and students. The chat room is primarily geared to the enlisted courses. The books available are those that have been found by both facilitators and students. There is, though, a lack of recent academic input and this may leave a learning void that could be exacerbated without periodic attendance at academic conferences and seminars on the topics of both adult learning and leadership to keep up with the latest research. All of the adult learning practices addressed in this section are not used, in part or in whole, by either course for many reasons. There are three major areas that influence the implementation of adult learning practices: the institution itself, the capabilities of the student, and the subject matter.

5. Constraints on Fully Implementing Adult Learning

The institution has a major impact on the implementation of adult learning practices. There are certain skill sets that the Navy wants the adults to have and those skill sets need to be acquired in an efficient manner. No organization has unlimited resources. The Navy is no exception. The AOLTC and Facilitator Training curricula are sanctioned by the Navy to impart certain skill sets to the student. In light of limited resources, it cannot support developing real autonomy in the students. Additionally, the structure of a military organization precludes certain processes of adult learning such as peer relationships and developing autonomy.

The capabilities of the student affect the ability to implement adult learning practices. Specifically, many adults are not prepared for a self-directed learning experience. Preparing them for it is an evolutionary process that takes a great deal of time on the part of both the student and facilitator, as well as a strong inclination on the part of the student to undertake a self-directed learning process.

The subject matter also has an impact on the ability to implement adult learning practices. Technical classes, particularly the introductory or basic classes are limited in their opportunities for autonomy and self-directedness. Technical subjects need to be learned at a basic level as a building block for more thought-provoking material. For these subjects, students can best be

served by employing the directive, pedagogical model with certain additions from adult learning to encourage student success. While the subject matter of the courses evaluated in this research does lend itself to adult learning, this is outweighed by institutional and student concerns.

Those several areas not adhered to by either course are too difficult based on the constraints from the institution, the length of the course, and the composition of the class. Overall, both curricula endeavor to implement good adult learning in every practicable respect.

B. RECOMMENDATIONS

1. Follow-on Survey Instrument for Effectiveness

Administer a survey instrument to all graduates approximately nine months after graduation to determine student opinions of the validity of the material with respect to their jobs. Nine months should be long enough for the former students to be established in their new positions but not too long for them to still be able to offer useful feedback on course improvements. These opinions should be compared to those offered earlier in the exit surveys that are currently administered to determine if attitudes changed once students return to their jobs.

2. Resources

Ensure that all facilitators have updated information on the latest leadership and adult learning research. While there is much opportunity for peer input and general, off-the-shelf learning, the academic research literature is limited, or unavailable, to the facilitators. Some level of the chain of command needs to be involved in attending academic and institutional conferences to keep abreast of the latest research in leadership and facilitation. It would be cost prohibitive for everyone to attend these academic seminars, but ensuring the Center for Naval Leadership had ties to such organizations and then distributed the information throughout the Center could add another dimension to mission accomplishment.

APPENDIX

Leadership Training Course Evaluation

Rank, Name: _____ Next Duty Station: _____

Phone#: _____ Class#: _____ Course Title: AOLTC

Facilitators:

GENERAL

COMMENTS:

What was the best aspect of this course?

Specific curriculum concerns:

Suggestions for course improvement:

How would you describe the facilitators' team dynamics?

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